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Sponge eating: an unusual cause of severe anemia

To the Editor: A 20-year-old Moroccan girl was referred to our department because of profound asthenia, palpitations, and dyspnea after very moderate effort. On physical examination she appeared to have normal, but her skin was pale and she had brittle nails. Initial laboratory results revealed hypochromic, microcytic, iron-deficiency anemia (IDA) (hemoglobin 3 g/dL, a mean corpuscular volume 65 μm^3, a mean corpuscular hemoglobin concentration 29%, reticulocytes 0.9%, iron 25 µg/mL, serum ferritin 6 ng/mL) with normal white blood cell count 5800/mm^3 and platelet count of 195 000/mm^3. Her blood film confirmed moderate anisopoikilocytosis. IDA was the most likely cause, but further investigations (occult stool blood test, gastroscopy, colonoscopy, gynecological examination, hemoglobin electrophoresis) failed to show an obvious bleeding source or abnormal hemoglobin.

Exploring her food patterns she confessed to regular eating of sponge for more than ten years. The symptoms disappeared fully following initial management with blood transfusion and subsequently with oral iron replacement treatment. The self-sponge eating was interpreted as depression-related. She was discharged on psychotherapy with outpatient follow-up. Six months later, a routine checkup revealed no evidence of anemia.

Pica, the craving and subsequent consumption of non-food substances has been an enigma since ancient times. Compulsive ingestion of unusual substances either edible or nonedible is relatively common in patients with IDA.[1] There is a recognized association between IDA and pica, leading to debate as to which is cause and which effect. Worldwide, 25% to 33% of all pica cases involve small children, 20% are pregnant women, and 10% to 15% are individuals with learning disabilities.[2] Why pica should occur is unclear, although various psychological, nutritional, cultural and pharmacological theories have all been proposed.[3] The commonest forms of pica are geophagia (soil), pagophagia (ice) and trichophagia (hair) but the sponge eating as pica is very rarely reported.[4] This exceptional case of severe IDA related to long-term ingestion of large amounts of sponge clearly meets the diagnostic criteria of adult pica. Natural sponge contains various proteins and minerals, and is often fortified with silica or calcium salts.[4] We wondered whether a craving of an unidentified salt fuels the eating of sponge, or whether the texture of sponge is simply orally stimulating. So far as we know, this is the first case of sponge eating reported in an adult. In the context of an unexplained IDA, it is important to remember and inquire about pica.

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DOI: 10.5144/1658-3876.2012.125

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Favorable outcome in a patient with vulvar mucormycosis during acute myeloid leukemia induction with medical management alone

To the Editor: Primary cutaneous mucormycosis is an uncommon infection caused by rare filamentous fungi *Zygomycetes* of the order Mucorales. A high degree of suspicion, early diagnosis, surgical debridement and antifungal treatment remain the corner stone of treatment.[1] We encountered a patient with vulvar mucormycosis that we present here for its rarity, and to emphasize the importance of meticulous clinical examination in neutropenic patients.

A 30-year-old female with acute myeloid leukemia (AML) undergoing induction chemotherapy (3+7; daunorubicin and cytarabine) developed fever on day 7 of induction. She was started on empirical antibiotics piperacillin/tazobactam and was already on f uconazole prophylaxis. After an initial response she had breakthrough fever on day 14 (total white cells: 1×10^9/ L , neutrophils 220/µL). A meticulous search for a focus revealed a small swelling over the labia majora. At this point, the antibiotic was changed to imipenem and vancomycin and empirical amphotericin B (1 mg/kg) was started. A biopsy was done from the lesion and sent for histopathology and cultures. By day 18 the swelling ulcerated and was painful (**Figure 1A**). The histopathology showed organisms with broad septate hyphae in a background of necrotic material (**Figure 1B , 1C**) with features of angioinvasion suggesting mucormycosis (**Figure 1D**). Cultures were sterile. Surgical debridement was considered but was deferred due to spiking fever with low total and platelet count; am-

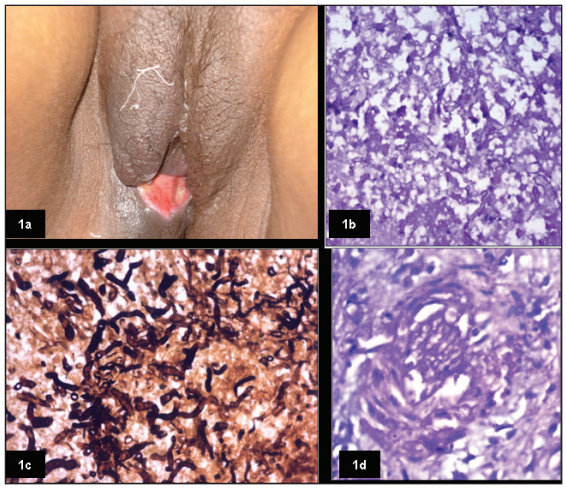

Figure 1A. Ulcerated vulval ulcer on day 18.

Figure 1B. Organisms with broad nonseptate hyphae in necrotic material (HE stain ×40).

Figure 1C. The broad nonseptate hyphae of mucor have stained black (GMS staining ×40).

Figure 1D. Invasion of artery by mucor (HE stain ×40).

photericin B was continued. There was minimal progression of the ulcer over the next 2 days, but by day 21 there was recovery of white cells (total white cells, 2.9×10^9/L). Soon, fever resolved and the lesion started healing; by day 37 only a 2-cm induration was visible. The patient continued on daily amphotericin B for another 4 weeks after which it was administered on an alternate day schedule during the consolidation cycles (high-dose cytarabine). Currently, 6 months after therapy the patient continues to be in remission and has no evident lesion over the vulva.

Cutaneous (10% to 19 % of all mucormycosis) presentation of mucormycosis may have a favorable outcome with early detection and treatment but advanced lesions have up to 80% mortality.[2] Definitive treatment includes aggressive surgical debridement, early use of effective antifungal therapy, and correction of predisposing factors. Very few cases of vulvar mucormycosis has been reported.[3]

Surgical debridement is often difficult in patients with acute leukemia due to combination of factors like ongoing sepsis and very low blood counts, but earlier reports have documented successful treatment of mucormycosis in this setting with the use of antifungal alone.[4,5] In our case, early detection, institution of amphotericin B, and recovery of neutrophils within a week of onset of the lesion contributed to the successful and complete resolution of mucormycosis without resorting to aggressive and potentially mutilating surgical debridement.

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DOI: 10.5144/1658-3876.2012.125a

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erratum

In the letter Orphanos et al. Mesothelioma in Cyprus: a case series (1997-2007). Hematol Oncol Stem Cell Ther. 2011;4(4):193-4. PMID: 22198194 the last name of the fifth author should have been Charalambous instead of Haralambous. Charalambous H in the PubMed entry.